

REMARKS

Reconsideration and allowance are respectfully requested.

Remarks Regarding Claim Amendments:

Claims 1, 2, 5 and 9 are amended to correct typographical errors and to more clearly define the invention according to the Examiner's suggestions.

Recitations in claims 1 and 5 are moved to new claims 16 and 17.

The claim amendments are fully supported by the original disclosure and, thus, no new matter is added by their entry. It is noted that the claim amendments are being made to correct informalities and conform to U.S. practice; they are not required for patentability.

Remarks Regarding Section 112:

Claims 1-15 stand rejected under 35 U.S.C. § 112 second paragraph as allegedly indefinite. Applicants traverse. Each basis of the rejection is addressed below individually.

Claim 1 is allegedly indefinite because of the phrase "in the presence of 1, respectively 2 equivalents of a base." This phrase is replaced by "in the presence of 1 or 2 equivalents of a base."

Claim 2 is allegedly indefinite because of improper Markush language. This claim has been amended to comply with proper Markush terminology.

Parentheses in the claims have also been reduced at the suggestion of the Examiner.

This rejection is moot in view of the claim amendments and its withdrawal is requested.

Remarks Regarding Section 102:

A claim is anticipated only if each and every limitation as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of Calif.*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical

invention must be shown in as complete detail as is claimed. See *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Claims 1-4, 7, 8, 10, and 12 stand rejected under 35 U.S.C. § 102 as allegedly anticipated by von Haken Spence (U.S. Patent 6,355,744) and McMeeking (U.S. Patent 6,420,300) independently. Applicants traverse.

The claimed invention, as recited in claims 1-4, 7, 8, 10, and 12, is directed to a one step process for the preparation of a metal-organic compound. The claims are not anticipated by von Haken Spence or McMeeking at least because each reference, individually, do not disclose a one step process.

von Haken Spence and McMeeking are each directed to two step processes which are unlike Applicant's one step process. von Haken Spence describes, in Example 2, the following two step reaction to make $t\text{Bu}_3\text{P}=\text{NTiCl}_2\text{Cp}$:



McMeeking refers to a similar two step process. Thus, both von Haken Spence and McMeeking refers to a clear two step process which contains (1) a first step where the Li-salt of the ligand is formed and (2) a second step where this salt is reacted with titanocene (IV) dichloride or CpTiCl_3 .

The claimed invention, directed to a one step process, is novel over von Haken Spence and McMeeking at least because neither von Haken Spence nor McMeeking describes a one step process where the ligand reacts directly with, for example, CpTiCl_3 in the presence of any inorganic or metal-organic base.

For the reasons stated above, claims 1-4, 7, 8, 10, and 12 are (1) novel over von Haken Spence and (2) novel over McMeeking. Withdrawal of the Section 102 rejection is requested because each of the cited documents fails to disclose all limitations of the claimed invention.

Remarks Regarding Section 103:

A claimed invention is unpatentable if the differences between it and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art. *In re Kahn*, 78 USPQ2d 1329, 1334 (Fed. Cir. 2006) citing *Graham v. John Deere*, 148 USPQ 459 (1966). The *Graham* analysis needs to be made explicitly. *KSR v. Teleflex*, 82 USPQ2d 1385, 1396 (2007). It requires findings of fact and a rational basis for combining the prior art disclosures to produce the claimed invention. See *id.* (“Often, it will be necessary for a court to look to interrelated teachings of multiple patents . . . and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue”). The use of hindsight reasoning is impermissible. See *id.* at 1397 (“A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning”). Thus, a *prima facie* case of obviousness requires “some rationale, articulation, or reasoned basis to explain why the conclusion of obviousness is correct.” *Kahn* at 1335; see *KSR* at 1396.

Claims 13-15 stand rejected under 35 U.S.C. § 103 as allegedly obvious in view of von Haken Spence or McMeeking independently. Applicants traverse.

As discussed above, each of von Haken Spence or McMeeking does not anticipate the claimed invention at least because the claimed invention is directed to a one step process while von Haken Spence or McMeeking are directed to two step processes.

The two step process contains disadvantages not found in Applicants’ one step process. One disadvantage of the von Haken Spence or McMeeking process is that $t\text{Bu}_3\text{P}=\text{NLi}$ easily hydrolyzes under the formation of the thermodynamically more stable and undesired phosphin oxide under liberation of NH_3 , as is evident from Scheme 1 of Katti (enclosed document: Katti et al., 30 *Inorg. Chem.* 2631-22 (1991)). Since neither von Haken Spence nor McMeeking disclose or even suggest that the undesirable hydrolysis can be avoided by the one step process according to Applicants’ claimed invention, the present invention is not obvious in view of these references.

For the reasons stated above, Applicants submit that von Haken Spence, McMeeking, or a combination of the two references does not disclose a one step method for producing metal organic compounds with at least one imine ligand as claimed in the instant claims. Withdrawal of the Section 103 rejections is requested because the claims would not have been obvious to one of ordinary skill in the art when this invention was made.

Remarks Regarding Double Patenting Rejection:

Claims 1-15 stand provisionally rejected on ground of nonstatutory obviousness-type double patenting as allegedly unpatentable over claims 1-16 of copending Application No. 10/567,098. Applicants traverse because a terminal disclaimer may be submitted or conflicting claims 1-16 may be canceled upon an indication of allowable subject matter. To require submission of a terminal disclaimer prior to an indication that the claims are otherwise allowable would constitute an undue burden on Applicants because no allowable subject matter in either application has been indicated by the Patent Office.

Withdrawal of the double patenting rejection is requested.

Remarks Regarding Allowable Subject Matter:

Applicants note, with appreciation, that the Examiner has acknowledged that claims 5, 6, 9 and 11 contain allowable subject matter.

Conclusion

Having fully responded to the pending Office Action, Applicants submit that the claims are in condition for allowance and earnestly solicit an early Notice to that effect. The Examiner is invited to contact the undersigned if additional information is required.

Respectfully submitted,

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